

TIGRIS® ePRO®

CI/SfB

68

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Authorisation Solutions Optimising Security and Convenience



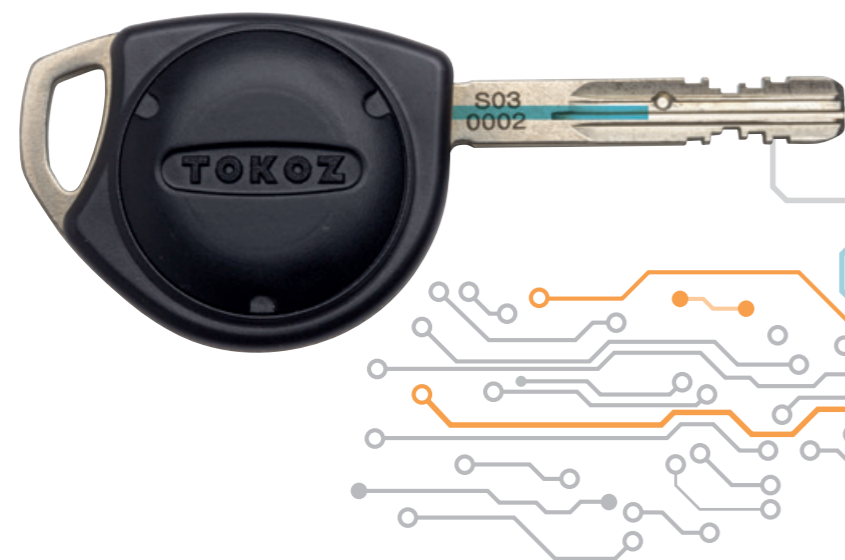
ACCESS 2

SECURITY | CONTROL | ACCESS

The security of dual authorisation
in one simple credential.
Secure. Flexible. Smart.

The new Tigris ePRO cylinder may look and function like any standard mechanical locking cylinder but this is no ordinary locking device. The ePRO mechatronic cylinder combines the security and reliability of mechanical cylinder locks with the flexibility and control of electronic systems. Flexible and forgiving, with intelligence inside, ePRO increases system capability but not at the expense of security. ePRO provides 90% of the benefits of an access control system but without the need for expensive cabling, containment and the associated installation costs. An electronic processing unit within the cylinder is programmed to accept or reject keys in accordance with a set of parameters managed within an easy to use web based App. A valid key must therefore:

- Have the correct mechanical key profile
- Be authorised electronically to pass that cylinder
- Be within the authorised time and/or date parameters



USE IT LIKE A STANDARD CYLINDER - BUT WITH MUCH MORE CONTROL

ePRO mechatronic cylinders can be used like any conventional euro profile cylinder. When used in conjunction with a suitable mortice lock it allows you to operate the latch and/or deadbolt in the usual way, with keyed access from one side or both.

It can be used with any locking device that uses a euro profile cylinder (including padlocks) and has all the benefits of a conventional masterkeyed cylinder but with a number of distinct advantages:

- A higher level of security due to the dual mechanical/electronic credential
- Lost differ keys or masterkeys can be deleted *instantly* without having to change out cylinders and replace other keys on the system
- Key authorisations can be altered without having access to the keys
- Cylinders and keys can be interrogated to trace their usage history
- No need to worry about key patents expiring - ePRO keys can never be copied
- There is no power needed at the cylinder so this can be a direct replacement of a standard mechanical cylinder

Imagine having a key which can be altered or deleted automatically while it's in your pocket or bag.

What makes Tigris ePRO so powerful is the simple but effective way it can control the continued authority of each key in the system through a process of "Revalidation". In principle, each individual key can be rendered "Invalid" until the electronic signature within the key is revalidated. Keys can be set to expire at the end of each week, or each shift or even after each use.

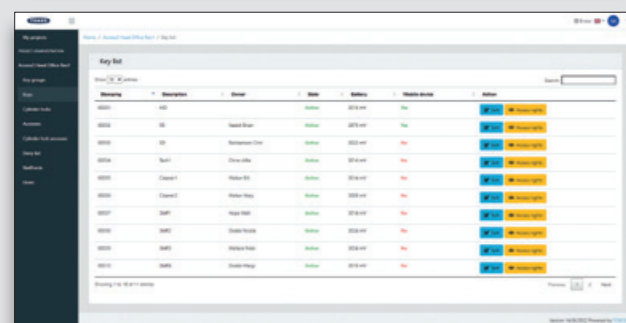
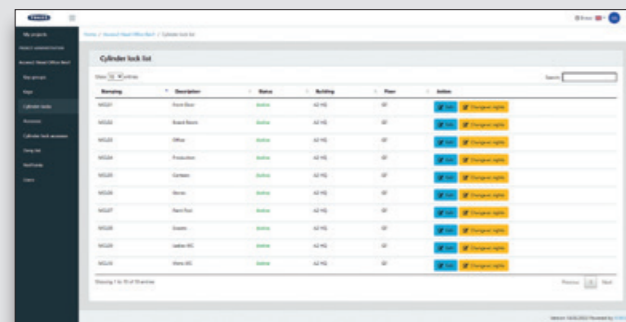
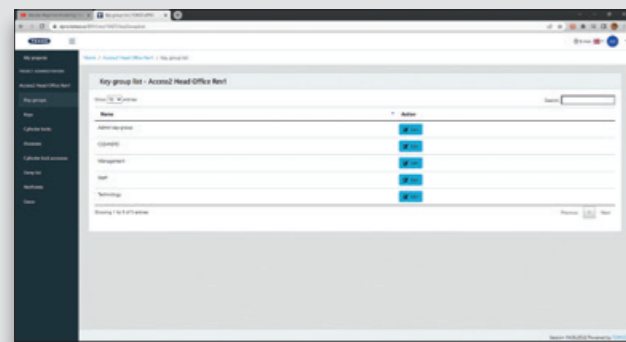
Updating your key's authority to pass each cylinder, hourly, daily, monthly - you decide.

The process of "Revalidating" your keys can be done in a number of ways and each key in the system can be treated differently if required:

- Using a **NetPoint** device which is controlled remotely from the administrator's PC or laptop. The **NetPoint** can be sited anywhere, either remote from the site (at the works depot for example) or even directly by the entrance door for example.
- Via Bluetooth™ from your SmartPhone. There is no power needed at the cylinder so this is a convenient and cost effective way of maintaining security, particularly at remote locations or for locking points which are outside the building envelope such as entrance gates. Your phone will simply search for revalidation while it's in your pocket or bag.



Simple web based software to manage who can go where, when and for how long



SYSTEM PROGRAMMING AND ADMINISTRATION

The system is controlled using a simple and intuitive web based software application, accessible from any browser. It allows the system's administrator to set up and manage their system from any location, to establish the system operating parameters for:

- Identifying individual doors/gates and other locking points
- Identifying different users or groups of users
- Assigning users' access rights by location, date, time and duration
- Issuing keys and programming cylinders
- Interrogating keys and/or cylinders for audit trail purposes
- Altering access rights for individual users
- Adding new cylinders and keys to the system

SYSTEM IN OPERATION

A **Programming Key** is used to transfer the data from the software to each cylinder. Once inserted into each cylinder it transfers the schedule of keys into the memory of the mechatronic part of the cylinder.

When a **User Key** is inserted into the cylinder it reads the cylinder's name and decides whether it has permission to unlock. Successful opening is indicated by a flashing (green LED) or failed (red LED) on the top of the key.

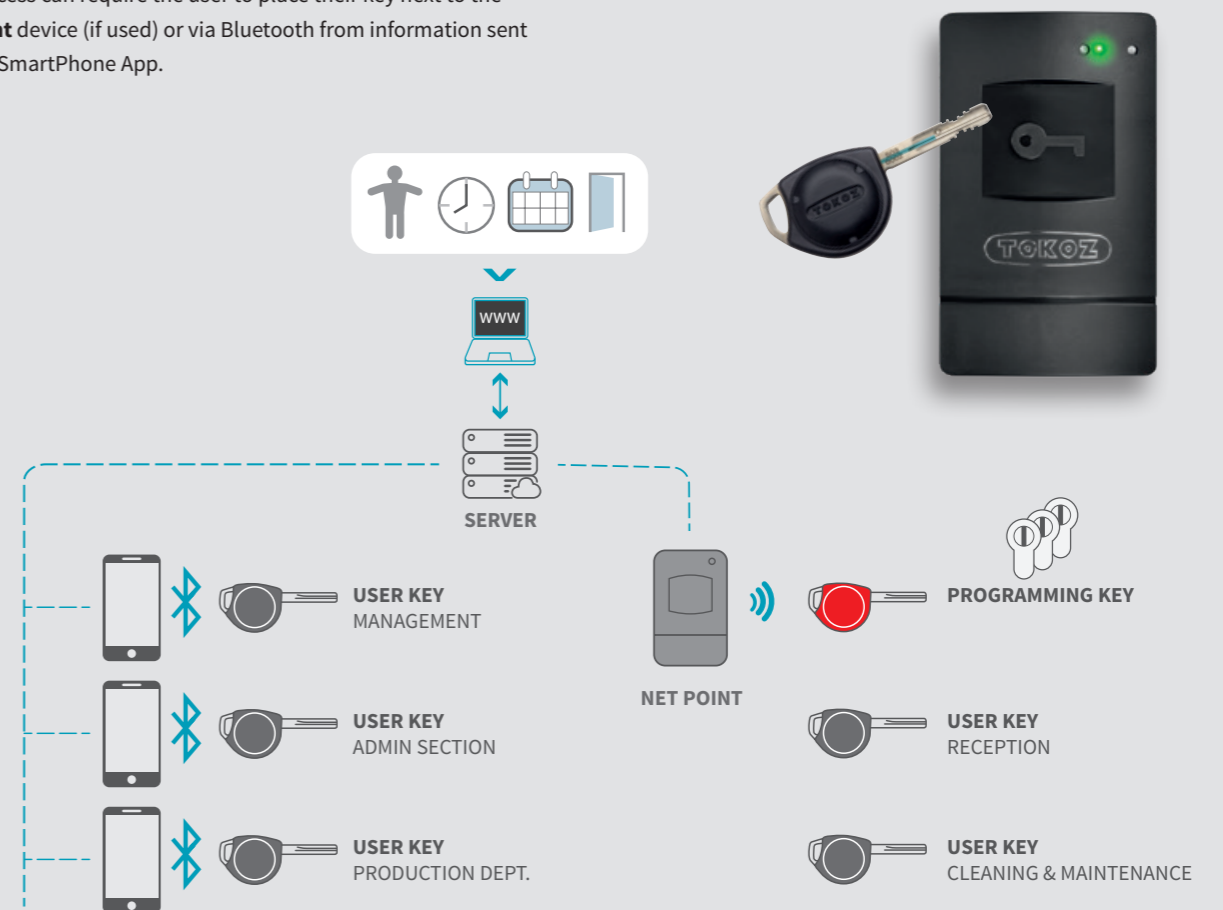
REVALIDATING KEYS

The software allows the administrator to set up the revalidation process to suit the application and the individual users. The system allows total flexibility from no requirement to revalidate up to time or date restricted authority which will require revalidation for each use.

The process can require the user to place their key next to the **NetPoint** device (if used) or via Bluetooth from information sent to their SmartPhone App.

AUTOMATIC REVALIDATION

User keys can be programmed to search for a revalidation signal from their SmartPhone automatically, therefore keeping a constant check on security. The frequency of checking can be limited to save battery life within the key.

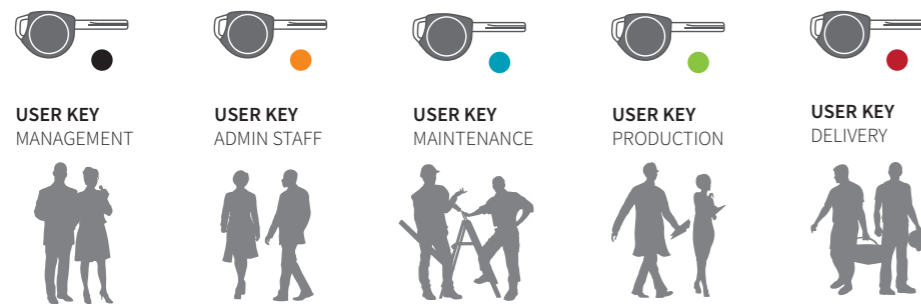


Making the system work for you, whether it's 2 keys or 2000 keys.

The flexibility in how an ePRO system can be applied makes it ideally suited to a range of applications in the public and private sector when compared to other forms of access control.

- Economic solution with no power required at the point of locking
- Can be a simple retrofit to existing euro profile cylinder applications
- Wide range of locking formats from mortice locks to van locks and padlocks
- Easy to use software to programme and manage the system
- Suitable for internal and external applications and maintenance free
- Control locations where it is impractical to provide power
- No batteries in cylinders to run down, monitor or replace - simply fit and forget
- Full integration with a conventional mechanical key system where the additional security element is not needed
- Intuitive operation - no need for cards, tokens or PINs, just your key

A system typically gives the service provider the ability to determine who has access to which locks, at which times and for how long.



Protecting people, property and assets, wherever they are and whatever the scale.

EDUCATION

Teachers need just 1 key for the doors in their own department and limited to normal hours and days of working.

Access rights are easily changed as the situations change without access to keys.

Cleaners key can have zones and time frames applied to the rights daily for which area is being worked in.

Audit access to high security areas – chemical stores, exam rooms etc.

Areas that require specialist approval – doors leading onto roofs, lift and plant rooms, padlocks to perimeter fences can be time/date/person specific.



CARE HOME

Still a conventional key is familiar and easy to use for residents.

Choice of colour bows for the key to help visual aid.

Time frame applied to entrances so residents key will function only during the day and not at night.

Visitors and support workers keys can be time/date limited and can be "revalidated" by NetPoint or SmartPhone.

Audit trail allows management to monitor the residents are receiving the correct visits from the right people at the right times.



Your ePRO key will give instant feedback to show whether it has been accepted or denied access.



INFRASTRUCTURE

Visitors to remote sites can be issued with a single key for multiple lock types to access doors, high security perimeter gates and equipment.

Keys can require "Revalidation" for every use for each site via SmartPhone.

Audit trail can be used to verify site visits.

Many such applications make other forms of electronic access control either economically or technically impractical and a mechanical locking system inadequate.



HOSPITAL

Nurses key can have rights applied to rotas, days, length of shift, which wards etc.

Individual doors to drug cupboards or pharmacy requiring authorisation can be user-specific.

Audit trails can be used to monitor drugs stores etc.

Cylinders can be applied to bin locks to control waste procedures.

Use of NetPoint devices at critical locations can be used to require keys to be "Revalidated" to gain access.

Contractor keys can be issued for specific locations and time frames for maintenance.



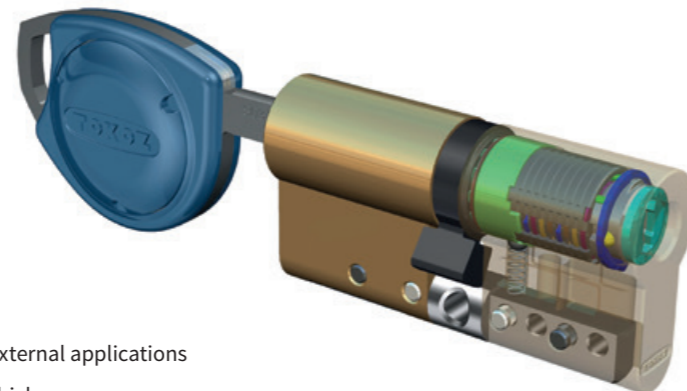
Tried, Tested, Trusted - high security mechanical genetics, combined with the latest high security electronic encryption.



Based on Pro300 high security cylinders widely used in the most demanding of environments. Protected by patent and incorporating rotating disc mechanisms manufactured from stainless steel, ePRO mechatronic cylinders offer the very latest advancement in electronic key technology

ePRO cylinders are highly resistant to attack and have the following features:

- No external electronics which can be susceptible to attack
- System is powered by the battery contained in the key
- Secure encrypted communication - Communication between the key, the mechatronic cylinder and the control software is performed using AES 128 symmetric encryption which prevents key duplication
- Certification to EN 15684 and EN 1303
- 29,667 event log memory capacity
- Key battery operation @ 20,000 cycles
- High intensity LEDs for visual verification
- Operating temperature -15 °C to +60 °C
- 100% resistant to lock picking and hook picking
- 100% resistant to bumping
- 100% resistant to traditional drilling
- High resistance to snapping
- High resistance to dust and water ingress suitable for external applications
- Modular construction to suit different door types and thicknesses



NO BATTERY NEEDED

Electronic cylinders that use cards and tokens require a large external reading antenna and to power this a battery source.

ePRO mechatronic cylinders are powered from the key, making them ideal for remote locations where battery monitoring and changing is not possible or practical.

They also have a non volatile memory so even though they are not constantly powered, they retain program settings and audit trails.

ePRO programming keys and user keys will communicate the system status with clear LED signals in the top of the key.

When entered into the cylinder, the Programming Key transfers data from the Software programme with details of keys and access patterns.



A range of locking options.

In normal circumstances, providing access control to a remote site like the one opposite would be highly impractical.

The ePRO cylinder range can be used on all types of timber or metal internal and external doors fitted with mortice locks. However, the nature of the ePRO cylinder makes it ideally suited to a wide range of security applications, many of which will require a different locking method. We produce a range of locking solutions which can be used in conjunction with ePRO cylinders and combined into the same system.

Typical applications include:

- Perimeter gates and fences
- Garages, bike shelters and lock-ups
- Premises fitted with roller shutters
- Vehicle locks
- Security boxes and hatches
- Kiosks and cage enclosures
- Bins and other freestanding objects



The **OMEGA PADLOCK** is a contract level padlock suitable for use in security applications.

- Compatible with ES40 single cylinder
- Constructed from ZAMAC 5 Zinc alloy for robustness and corrosion resistance
- 8mm hardened steel shackle (62mm clearance)



The **X SAFETY BOX I** is an innovative alternative to a hasp and padlock suitable for double doors/gates.

- Compatible with ES40 single cylinder
- Simple and easy to use as all hardware remains on the doors/gates
- Cast zinc body with Chrome-Manganese steel pin
- Ion nitration surface for corrosion resistance



The **X SAFETY BOX II** is an innovative alternative to a hasp and padlock suitable for overhead doors, single doors and gates.

- Compatible with ES40 single cylinder
- Simple and easy to use as all hardware remains on the doors/gates
- Cast zinc body with Chrome-Manganese steel pin
- Ion nitration surface for corrosion resistance



Konti Pro is a dual function security product to secure bins or other containers or to be used as an anchor point for free standing objects.

- Compatible with ES40 single cylinder
- All hardware remains fixed to surfaces
- Zinc alloy body for high impact resistance
- Galvanised steel chain - 160mm or 200mm long

ACCESS2



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